

Claims

1. Kit for screening molecules with an anti-prion activity, characterized in that it comprises in
5 combination a yeast of phenotype [*PSI+*], an antibiogram and a prion curing agent in sub-effective doses, said yeast having the *adel-14* allele of the *ADE1* gene as well as an inactivated *ERG6* gene.
- 10 2. Kit according to claim 1, characterized in that the yeast is *Saccharomyces cerevisiae*.
3. Kit according to claim 1 or 2, characterized in that the prion curing agent is guanidium chloride.
- 15 4. Method for screening molecules with anti-prion activity, characterized in that it uses a [*PSI+*] phenotype yeast having the *adel-14* allele of the *ADE1* gene as well as an inactivated *ERG6* gene and comprises
20 the following stages:
 - a. production of a lawn of cells *in vitro* on a medium complemented with a sub-effective dose of a prion curing agent,
 - b. deposition of the compounds to be tested according
25 to the antibiogram method,
 - c. incubation for approximately 2-4 days at approximately 20-25°C, and,
 - d. analysis of the staining of the cell colonies.
- 30 5. Screening method according to claim 4, characterized in that the yeast is *Saccharomyces cerevisiae*.

6. Screening method according to any one of claims 4 or 5, characterized in that the curing agent of Stage a. is guanidium chloride.

5 7. Screening method according to any one of claims 4 to 6, characterized in that it moreover comprises the following stages:

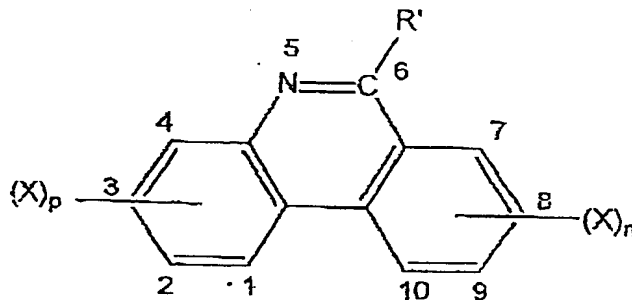
e. incubation for approximately 2-4 days at approximately 2-6°C, and/or,

10 f. carrying out a secondary screening test.

8. Screening method according to claim 7, characterized in that the secondary screening test comprises the following stages:

- 15 - construction of a strain of yeast in which the *ADE2* gene is under the control of the *DAL5* gene promoter
 - carrying out Stages a. to e. of the methods according to claims 4 and 7.

20 9. Compound of formula (II) in which:



(II)

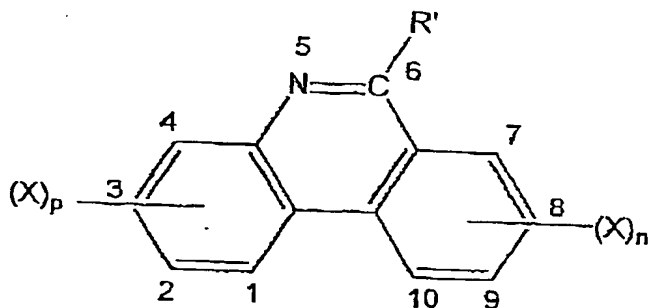
30 R' represents an H, NH₂, NH-(CH₂)₃-N(CH₃)₂, NH-CH(CH₃)-(CH₂)₃-N(CH₂-CH₃)₂ group,

X represents F, Cl, CF₃,

p and n, identical or different, are equal to 0, 1 or 2

for use as a medicament.

10. Compound according to claim 9, of formula (II) in which:



(II)

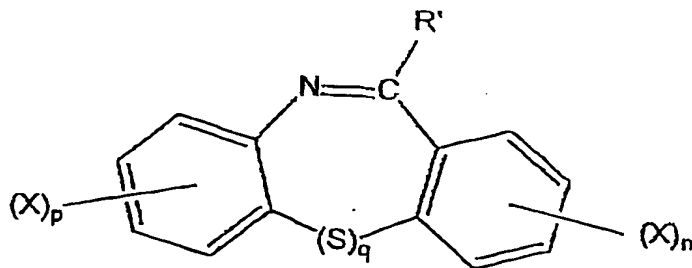
R' represents an NH_2 group,

X represents F, Cl, CF_3 ,

p and n, identical or different, are equal to 0, 1 or 2,

for use as a medicament.

11. Use of the compound of formula (I)



(I)

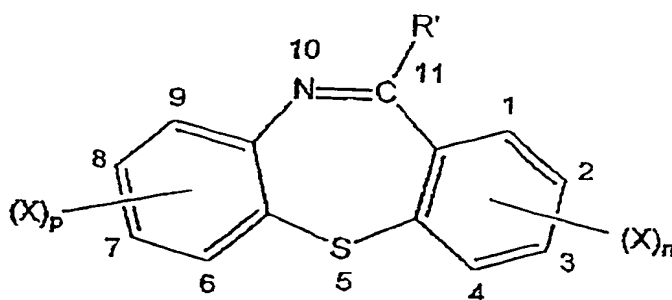
in which R' is an H, NH_2 , NHR^2 group, where R^2 is an alkyl or alkylaminoalkyl chain with 1 to 10 carbon atoms, branched or unbranched,
X represents F, Cl, Br, I, CF_3 , SCH_3 , OCH_3 , OH, NO_2 , COCH_3 , CONH_2 , COOH , COOR^3 , where R^3 is an alkyl group with 1 to 4 carbon atoms,

p and n, identical or different, are equal to 0,
1 or 2,

q is equal to 0 or 1,

in order to obtain a medicament intended for treating
5 neurodegenerative diseases involving protein aggregates.

12. Use of the compound of formula (III) in which:



(III)

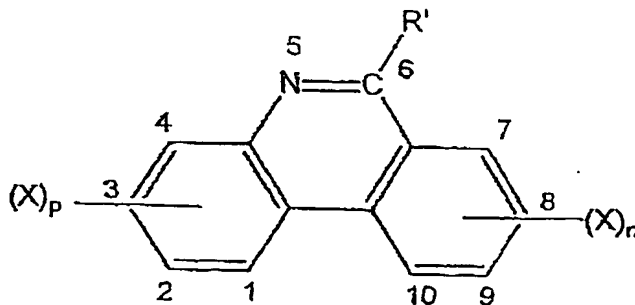
R' represents an H, NH₂, NH-(CH₂)₃-N(CH₃)₂, NH-
CH(CH₃)-(CH₂)₃-N(CH₂-CH₃)₂ group,

X represents F, Cl, CF₃,

p and n, identical or different, are equal to 0,
1 or 2.

in order to obtain a medicament intended for treating
neurodegenerative diseases involving protein aggregates.

13. Use of the compound of formula (II) in which:



(II)

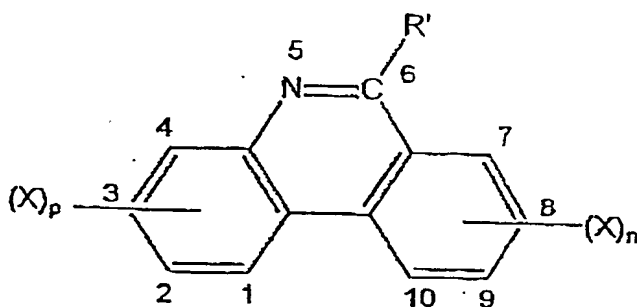
R represents an H, NH₂, NH-(CH₂)₃-N(CH₃)₂, NH-
CH(CH₃)-(CH₂)₃-N(CH₂-CH₃)₂ group,

X represents F, Cl, CF₃,

p and n, identical or different, are equal to 0, 1 or 2,

in order to obtain a medicament intended for treating neurodegenerative diseases involving protein aggregates.

14. Use of the compound of formula (II) in which:



(II)

R' represents an NH₂ group,

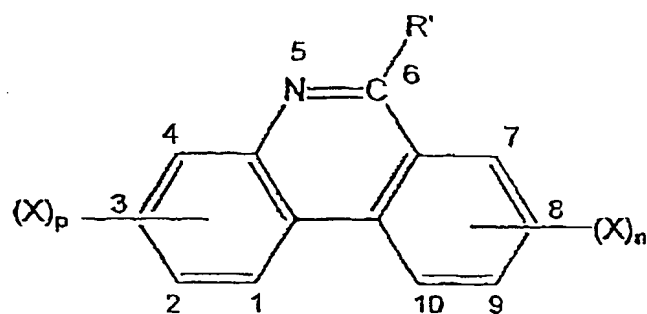
X represents F, Cl, CF₃,

p and n, identical or different, are equal to 0, 1 or 2,

in order to obtain a medicament intended for treating neurodegenerative diseases involving protein aggregates.

15. Use according to claims 11 to 15, characterized in that the neurodegenerative diseases are the spongiform encephalopathies, Alzheimer's disease and Huntington's disease.

16. Pharmaceutical composition comprising a therapeutically effective quantity of at least one compound of formula (II) in which:



(II)

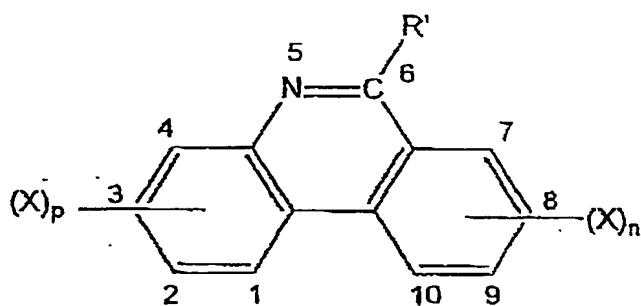
R' represents an H, NH_2 , $\text{NH}-(\text{CH}_2)_3-\text{N}(\text{CH}_3)_2$, $\text{NH}-\text{CH}(\text{CH}_3)-(\text{CH}_2)_3-\text{N}(\text{CH}_2-\text{CH}_3)_2$ group,

X represents F, Cl, CF_3 ,

p and n, identical or different, are equal to 0, 1 or 2.

in combination with at least one pharmaceutically acceptable vehicle.

17. Pharmaceutical composition comprising a therapeutically effective quantity of at least one compound of formula (II) in which:



(II)

R' represents an NH_2 group,

X represents F, Cl, CF_3 ,

p and n, identical or different, are equal to 0, 1 or 2,

in combination with at least one pharmaceutically acceptable vehicle.